

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,604	<b>Applicant(s)</b> PALMIERI ET AL.	
	<b>Examiner</b> P. Kathryn Wright	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 27-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>20100216</u> .                           |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                          |



## DETAILED ACTION

### *Status of the Claims*

1. This action is in response to the Appeal brief, filed October 27, 2009. Applicant's arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections, and new grounds for rejection. Any objection/rejection not repeated herein has been withdrawn by the Office.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "means for holding" and "means for moving" in the transport device of claim 27; "means moving" in the transfer station of claim 27, "vessel holding means" in claim 27; "means for holding" and "means for moving", the transfer station "means for moving " in claim 31, "means for delivering" in claim 32; and "means for moving" the vessel holding means in claim 38.

The rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the **terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.**" 37 CFR 1.75(d)(1).

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 42 to 44 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between the transfer shuttle, the first projecting member, and the second projecting member. It is not clear from the claims how upon sliding the transfer shuttle, a first projecting member contacts a first test vessel, and a second projecting member contacts a second test vessel. How are these elements structurally connected?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 27-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Choperena et al. (US Patent no. 5,380,487), hereinafter “Choperena”.

Choperena teaches a multipath access system for use in an automated immunoassay analyzer. The Choperena system comprises a transport device having means for holding a plurality of vessels 52 having a plurality of vessel holding members (i.e., carriers 64 and fingers 68). It is expected that the transport device moves a plurality of vessels along one or more continuous loops (e.g., along belt 54) via at least one motor (i.e., mechanism for moving the vessel holding means).

Choperena teaches at least two transfer stations 80, 120, each comprising a “means for moving” or transfer shuttle for moving the vessel in and out of the vessel holding means (e.g., carrier fingers 68 on belt 54). As to claims 40-41, the transfer shuttle includes a horizontal support (i.e., floor 104) and at least two projecting members (i.e., fingers 103) that project from the horizontal support. The projecting members 103 are spaced far enough apart to accommodate the vessel. The transfer shuttle is positioned to slide perpendicular to a portion of the transporter device (belt 54 and carrier 64). That is, the fingers 103 of Choperena slip between the fingers 68 of belt 54 in a direction perpendicular to a portion of belt 54 (see for example col. 13, line 10- col. 16, line 4 and Figs. 4-8).

As to claims 41-43, Choperena teaches the transfer shuttle (floor 104 and fingers 103) is positioned so that upon sliding in a direction perpendicular to a portion of the transporter device (e.g., carrier 64 and fingers 68), the first projecting member contacts a first test vessel 52 held in a vessel holding means 64 and pushes the first test vessel 52' from the transporter device 64 into the transfer station 80, while a second adjacent projecting member 130 contacts a second test vessel 52 held in the transfer station 80 and pushes the second test vessel 52 out of the transfer station into wash loop 101 of the wash station (see for example Figs. 4-5).

The system of Choperena also includes a programmable controller system programmed to determine the individual path (e.g., predetermined path 58) along the continuous loop for each of the vessels, wherein the determination of each path is based on resource requirement (e.g., types of reagents added, duration of incubation, dilution, agitation, number of wash cycles in wash station path 101) associated with

each vessel. See entire document, for example col. 5, line 33-col. 6, line 51, col. 17, line 56- col. 18, line 8 and col. 19, line 69-col. 20, line 31. The paths determined by the controller do not depend on the order in which the controller receives the information. That is, the Choperena analyzer controller does not follow a "first-in-first-out" pattern of entering and processing the test (see entire document, for example col. 5, line 26 to col. 6, line 64).

As to claim 31, the system of Choperena includes a second transport device that, like the first transport device, can house separate read station 130. The second incubation chamber will necessarily include all the elements of the first incubation chamber, including the transfer station positioned to slide in a direction perpendicular to the horizontal direction of the transport porter device belt 54 and shown in detail in Figs. 4-8 (see col. 41, lines 41-52). The second transfer station necessarily includes a second "means for moving" (or transfer shuttle) for moving the vessel in and out of the second vessel holding means 64 (see for example col. 14, lines 13 et seq.)

Regarding claim 32, the multi-path system of Choperena also includes at least one delivery station 72 for adding a vessel to the transport device at a specified vessel holding member 64 of the plurality of vessel holding members (see for example col. 12, line 17 et seq.)

With respect to claim 33, the Choperena system includes pipetting station 40 for adding one or more reagents to a vessel 52 positioned in a vessel holding member 64 of the transport device (see col. 10, line 3 et seq.)

As to claims 34-35 and 44, Choperena also teaches wash station 100 for washing test vessels positioned therein. The wash station 100 is combined with (attached to) the transfer stations 80, 120 (see Figs. 4-8.)

With respect to claims 36-37, Choperena teaches stationary (fixed) agitating means (spinning means not shown) positioned adjacent the transport device at a location where the vessels in the holding members contact the agitating member (see for example col. 16, lines 18-30).

Regarding claim 38, Choperena teaches the means for moving the vessel holding means 64 (i.e., via motor) is adapted to move the vessels in a clock-wise direction around the loop 54 (see Figs. 4-8).

As to claim 45, the Choperena controller determines an optimized individual path along a first continuous loop 54 for each of a plurality of samples based on a resource requirement (e.g., duration of incubation, dilution, agitation, number of wash cycles in wash station path 101) for each sample.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choperena.

As discussed above, Choperena teaches a means for moving the vessel holding means 64 (i.e., via motor) adapted to move the vessels in a clock-wise direction around the loop 54. Choperena also teaches the programmable controller is able to move and transfer the vessel between the continuous loops 54 to wash station loop 100 and/or read station loop 130. The Choperena controller determines an individual path along a first continuous loop 54 for each of a plurality of samples based on a resource requirement (e.g., duration of incubation, dilution, agitation, number of wash cycles in wash station path 101) for each sample and transferring the vessel from the first continuous loop 54 to a second continuous loop (i.e., wash station loop 100 or read station loop 130). Choperena teaches optimizing the path determined for each sample



such that samples having identical resource requirements travel an equal distance around the first continuous loop (see for example col. 5, lines 33- col. 6, line 20).

Choperena does not specifically recite herein for at least one sample the equal distance comprises the sum of a first distance and a second distance, wherein the first distance is traveled in a clockwise direction around the first continuous loop, wherein the second distance is traveled in a counterclockwise direction around the first continuous loop. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to move the motor of the first continuous loop (belt 54) clockwise and then counterclockwise so as to achieve the necessary incubation time before transporting to the second continuous loop (e.g., wash station loop 100 or read station loop 130).

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 27-37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. No claims are allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Kathryn Wright/  
Primary Examiner, Art Unit 1797